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| 10/722,351 | 11/25/2003 | Harry George Yaworski | NC070-US2/5487-142IP | 4728 |

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| EXAMINER |
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HAMMOND, BRIGGITTE R

| ART UNIT | PAPER NUMBER |
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2833

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,351

Applicant(s)

YAWORSKI ET AL.

Examiner

Briggitte R. Hammond

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 12, 21, 22, 29 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 and 34-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/26/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
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| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/26/03, 9/20/04, 5/10/06/</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Applicant's election without traverse of Species in the reply filed on December 27, 2004 is acknowledged.

Claim 12 is also withdrawn as being drawn to a nonelected invention, (the sealant being between the wall and the opening is not shown in applicant's elected species).

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connector block and the sealant being between the wall and the opening must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear to the Examiner exactly what or where is the "connector block". Therefore claim 16 was not examined in view of art.

Claim 16 recites the limitation "the connector block". There is insufficient antecedent basis for this limitation in the claim. Appropriate correction required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,5-8,10,11,13-15,17,18, 28,31, 32,35,39, 42 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by King Jr. RE 37 340. Regarding claims 1 and 28, King Jr. discloses an electrical connector for use with a conductor, the electrical connector 10 comprising: a) a housing 11,12 defining a port 34, the port including:

entrance and exit openings, and a conductor passage extending between and communicating with the entrance and exit openings, the conductor passage being adapted to receive the conductor therethrough (as shown in figs. 2 and 3); b) sealant 29 disposed in the conductor passage, the sealant being adapted for insertion of the conductor therethrough such that the sealant provides a seal about the inserted conductor; and c) a penetrable closure wall 26 extending across the conductor passage.

Regarding claim 32, King discloses an electrical connector comprising: An electrical connector for use with a conductor, the a housing 11,12 defining a port 34, the port including: an entrance opening; an exit opening; and a conductor passage extending between and communicating with the entrance and exit openings, the conductor passage being adapted to receive the conductor therethrough, a sleeve member 74 disposed in the conductor passage and defining a sleeve passage; and sealant 29 disposed in the sleeve passage, the sealant being adapted for insertion of the conductor therethrough such that the sealant provides a seal about the inserted conductor.

Regarding claim 2, wherein the closure wall 26 is operative to retain the sealant in the passage

Regarding claims 5 and 30, wherein the closure wall includes a plurality of discrete flaps.

Regarding claim 6, wherein the closure wall defines a hole adapted to receive the conductor.

Regarding claim 7, wherein the hole has an inner diameter smaller than an outer diameter of the conductor.

Regarding claim 8, wherein the closure wall tapers inwardly along a direction from the entrance opening to the exit opening.

Regarding claims 10,36 and 39, the closure wall is formed of a polymeric material (col. 8, line 5).

Regarding claim 11, at least a portion of the sealant is disposed in the conductor passage between the closure wall and the exit opening (as shown in fig. 3).

Regarding claim 13, the closure wall is integrally molded with the housing.

Regarding claim 14, King Jr. discloses an insert member 74 separately formed from the housing and positioned in the conductor passage, wherein the closure wall forms a part of the insert member.

Regarding claim 15, King Jr. discloses the housing includes a ledge 120 adapted to locate the insert member in the conductor passage.

Regarding claims 17,31 and 35, King Jr. discloses including a second penetrable closure wall 152 extending across the conductor passage such that the first and second closure walls define a sealing region therebetween, wherein at least a portion of the sealant is disposed in the sealing region.

Regarding claim 18, the first and second closure walls are operative to retain the sealant in the sealing region.

Regarding claim 19, King Jr. discloses an insert member 152 separately formed from the housing and positioned in the conductor passage, wherein the second closure walls forms a part of the insert member.

Regarding claim 20, the first closure wall 26 is integrally formed with the housing and the second closure wall 152 forms a part of the insert member.

Regarding claims 23 and 30, at least one of the closure walls includes a plurality of discrete flaps 26a.

Regarding claim 24, at least one of the closure walls defines a hole (see fig. 5) adapted to receive the conductor.

Regarding claim 42, King discloses a method for providing a seal to an electrical connector, the electrical connector including a housing defining a port 34, the port including an entrance opening, an exit opening, and a conductor passage extending between and communicating with the entrance and exit openings, the conductor passage being adapted to receive a conductor therethrough, the method comprising: inserting an insert member 74 into the conductor passage, the insert member including: a sleeve member defining a sleeve passage, and sealant 29 disposed in the sleeve passage, the sealant being adapted for insertion of the conductor therethrough such that the sealant provides a seal about the inserted conductor.

Regarding claim 43 King includes the step of securing the sleeve member in the conductor passage (threads 77).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashcraft 5,848,913 in view of Debbaut 5,672,846. Ashcraft discloses an electrical connector for use with a conductor, the electrical connector comprising: a) a housing 12 defining a port 44, the port including: entrance and exit openings, and a conductor passage extending between and communicating with the entrance and exit openings, the conductor passage being adapted to receive the conductor therethrough (as shown in figs. 1 and 2). Ashcraft does not disclose sealant disposed in the conductor passage, the sealant being adapted for insertion of the conductor therethrough such that the sealant provides a seal about the inserted conductor; and c) a penetrable closure wall extending across the conductor passage. However, Debbaut discloses an electrical connector having a sealant disposed in a conductor passage, the sealant being adapted for insertion of the conductor therethrough such that the sealant provides a seal about the inserted conductor; and c) a penetrable closure wall extending across the conductor passage (col. 3, line 64). It would have been obvious to one of ordinary skill in the art to modify the connector of Ashcraft by providing a gel sealant as a moisture seal and a penetrable closure wall to protect the gel as taught by Debbaut.

Regarding claim 27, Ashcraft discloses a) the housing defining a second port and an interior cavity, the second port including, a second entrance opening, a second

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exit opening, and a second conductor passage extending between and communicating with the second entrance opening and the second exit opening, the second conductor passage being adapted to receive a second conductor therethrough; b) (when modified by Debbaut) sealant is disposed in the second conductor passage, the sealant being adapted for insertion of the second conductor therethrough such that the sealant provides a seal about the inserted second conductor; c) (when modified by Debbaut) a second penetrable closure wall extends across the second conductor passage, d) each of the first and second ports communicates with the interior cavity; and e) the electrical connector includes: an electrically conductive busbar conductor member 13 disposed in the interior cavity, and at least one holding mechanism 28 to selectively secure each of the conductors to the busbar conductor member for electrical contact therewith.

Claims 9, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over King.

Regarding claims 9, 37 and 38, King is silent regarding the thickness of the sleeve members.

However, it would have been obvious to one of ordinary skill to make the sleeve members having a thickness of no more than 0.125 inch for compactness. Since a change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claims 25,26,40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over King Jr. in view of Debbaut 5,672,846. King does not disclose the sealant as being a gel. However, gel type sealants are well known in the art as

evidenced by Debbaut. Debbaut discloses a gel sealant 12. Therefore, it would have been obvious to one of ordinary skill in the art to modify the connector of King by providing a gel sealant as a moisture seal as taught by Debbaut.

Regarding claims 26 and 41, the gel is adapted to be elongated and elastically deformed by insertion of the conductor into the conductor passage.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brigitte R. Hammond

